

NAVAL WAR COLLEGE
Newport, RI

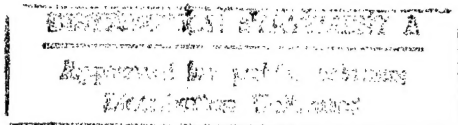
Let History Help...But Not Too Much: Effectively Using The JTCB

by

David Taylor
Lieutenant Commander, USN

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Operations Department.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.



Signature: David C. Taylor

13 June 1997

Paper directed by
G. W. Jackson, Captain, U.S. Navy
Chairman, Joint Military Operations Department

DTIC QUALITY INSPECTED 4

19970520 165

REPORT DOCUMENTATION PAGE

1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority: UNCLASSIFIED			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: JOINT MILITARY OPERATIONS DEPARTMENT			
6. Office Symbol: Naval Command and Staff College		7. Address: NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841-1207	
8. Title (Include Security Classification): (U) Let History Help... But Not Too Much: Effectively Using the JTCB			
9. Personal Authors: Lieutenant Commander David C. Taylor, U.S. Navy			
10. Type of Report: FINAL		11. Date of Report: 07 FEBRUARY 97	
12. Page Count: 20			
13. Supplementary Notation: A paper submitted to the Faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.			
14. Ten key words that relate to your paper: Joint Targeting Coordination Board, JTCB, JFACC, JIPTL, Joint Operations, Apportioning, DCJTF, JTL			
15. Abstract: This paper examines the role, participants and placement of the Joint Targeting Coordination Board (JTCB) in the joint force structure. Historical lessons learned from WWII through Bosnia and recent exercises are utilized, along with peculiarities of these conflicts which might make the lessons not applicable to future scenarios. It recommends changes to joint doctrine to require (vice make optional) a Joint Force Commander level JTCB for every situation where targeting the operational depth of an opponent is a possibility. Additionally, it recommends the JTL and JIPTL reside with the joint staff. Furthermore, it recommends participants include the functional Component Commander principals (JFACC, JFLCC, JFMCC, JSOTF, IW, etc.) to minimize service parochialism and maximize the synergy available from guidance and interaction available at this level.			
16. Distribution / Availability of Abstract:	Unclassified X	Same As Rpt	DTIC Users
17. Abstract Security Classification: UNCLASSIFIED			
18. Name of Responsible Individual: CHAIRMAN, JOINT MILITARY OPERATIONS DEPARTMENT			
19. Telephone: 841-6461		20. Office Symbol: C	

Contents

Introduction.....	1
Historical Lessons Learned.....	2
WWII.....	2
Korea.....	3
Vietnam.....	4
Gulf War.....	4
Bosnia-Herzegovina.....	6
Current Doctrine.....	7
Recent Lessons Learned.....	8
Conclusion.....	12
Endnotes.....	14
Bibliography.....	16

INTRODUCTION

Coordinated targeting is critical to military success. It is critical for all sized operations, from the rifle squad, to the Offensive Counter Air (OCA) flight, from the tank company, to the 80 plane strike package, and from the individual component commanders to the theater Commander in Chief (CINC). When joint forces are involved, several additional variables are encountered, none of which make the coordination easier, and yet the targeting is no less important. Coordination in joint targeting has seen its ebb and flow, and the positive and negative impacts of its successes and failures have been magnified since the introduction of the airplane. History has shown us that coordination raised the success level of operations significantly, and also that in other operations the success could have been higher had coordination been utilized. History has also shown us that fixing the coordination problems of past conflicts, or applying past solutions, may not be the proper course of action in a future conflict. The Joint Targeting Coordination Board (JTCB) concept has been tried in several forms, and at several levels in the command structure to help maximize the unity of effort within that command. History has shown through errors of commission or omission that when military situations require formation of a joint force, there is also the need for a joint targeting coordination board, which should be composed of senior personnel and work directly for the Joint Force Commander (JFC). This board should handle the macro level coordination issues required to maximize attainment of campaign or operational level objectives.

HISTORICAL LESSONS LEARNED

It is important to review some targeting history, to see how the joint targeting process has evolved, what problems have been encountered, and what solutions have been incorporated. Of particular significance are the lessons which might improve the overall targeting efforts at the operational and strategic level. Equally important, however, is the need to analyze peculiarities of each conflict and determine the limits of lessons learned as they might be applied to future scenarios. WWII, Korea, Vietnam, Desert Storm, and operations in Bosnia-Herzegovina all have lessons and limitations which merit discussion.

WWII

Two major lessons learned from WWII were the benefits of combining all air assets under one commander and the necessity and critical importance of unity of command. In the Southwest Pacific Area of operations, General MacArthur's air commander, General Kenney, demonstrated the benefits of apportioning all air assets correctly and efficiently to help attain overall joint campaign goals in the theater. Versed in sister service operations, he was able to recommend army and navy air operations that supported offensives at both the tactical and operational depth.¹

In North Africa, both the British and United States (US) air forces were originally assigned to individual ground units, but after several defeats and recalculations, control of aviation units were centralized in an attempt to increase the strategic depth and effects of operations. These unified national air forces were highly successful. So successful, in fact, that all Allied air forces in the North African theater were subsequently put under the unified control of Air Marshall Tedder.²

The critical importance of unity of command and unity of effort was painfully felt during the naval battle and invasion of Leyte Gulf Island in the Philippines in 1944. US Third Fleet and Seventh Fleet forces reported to different theater commanders, yet were involved in the same operation. Beating to different drums, these two fleets allowed a substantial Japanese surface force to approach the beachhead unchecked. But for some brave sailors and airmen, and a large dose of luck, disaster might have befallen the landing force. Had all naval forces been unified under one commander, however, coordination most likely would have been accomplished that adequately provided force protection for the entire operation.

Korea

Shrinking budgets, service parochialism and doctrinal differences combined to produce very little coordination during the Korean conflict. The lessons--of establishing functional component commanders (i.e. a JFACC), and of the benefits of constructing a coherent campaign targeting plan--would not be learned until after the Vietnam war. The Army and the Air Force could not agree on the amount of air effort required to provide direct support to the ground forces. Marines were embracing the dedicated air asset concept, keeping control of their air arm. The Navy maintained control of its aircraft for fleet defense and sea control, and even when extra sorties were available, the Air Force and Navy were not able to agree how to integrate sea-based and land-based air. This led to the Navy carving out a chunk of North Korea for their surplus sorties' sole use. A version of this concept would show up in the Vietnam War. Additionally, even control of the Air Force fighter, fighter-bomber, and B-29 bombers were divided.³

Vietnam

Vietnam brought forward incorrect lessons from Korea; we "won" the conflict, so the joint targeting strategy and coordination effort must have been sufficient. Once again, each service controlled their own aviation assets, and the Commander in Chief of Pacific Command (CINCPAC) divided up North Vietnam into sectors assigned to particular services. This system of individual sector responsibilities, named the route pack system, supposedly obviated any requirement for coordination. A targeting team was established at the Joint Chiefs of Staff (JCS) level, where the JCS chairman General Wheeler would present the recommendations to the President each week. When the severely restrictive "Presidential" target list was sent back in theater, the coordinating committee at CINCPAC divided it into parts for Navy and Air Force implementation. Additionally, the fact that the Strategic Air Command (SAC) retained control of the entire B-52 targeting process added confusion and fragmentation to the overall targeting coordination effort. This fragmented command and control system often led to duplicate targeting of some sites and failure to attack others.⁴

Gulf War

Between 1975 and 1990, the US military and government made major strides in exercising the principles of war and utilizing Operational Art (OPART) in general. During Desert Shield and Desert Storm, a unified Joint/Combined Force Commander (JFC) was assigned, and Joint/Combined Forces Land, Air and Maritime Component Commanders (JFLCC, JFACC, and JFMCC) were given control of all respective assets. And although the Marines and Navy retained a portion of their aircraft for the combined arms concept

and fleet operations, extra sorties were given up to the JFACC for use as he saw fit. The component commanders were given clear guidance from the National Command Authority (NCA) and CINC, and were allowed to use assets to best accomplish overall objectives.

Since the initial phase of Desert Storm was solely an air operation, the JFACC, General Horner, was given responsibility to coordinate interdiction efforts of all components. A Joint Targeting Coordination Board (JTCB) was formed under the JFACC to coordinate, plan, and execute the overall air operations plan in accordance with CINC strategy. This meant potential interdiction/operational depth target requests from all component commanders were recommended to the JTCB for incorporation into the JFACC concept of operations and eventually, if approved, into the Air Tasking Order (ATO) for execution. The JTCB in this role was successful in prioritizing targets, missions, and platforms to meet theater objectives, and additionally, this forum provided a centralized theater target database from which to draw upon.

There were problems with positioning the coordination board at this level, however. The software and communications equipment used were not compatible with US Navy systems, making it very difficult for Navy personnel to integrate well into the scheme of daily operations. Additionally, the JFACC staff was overwhelmingly United States Air Force (USAF), which led Navy officials to believe they were not getting sufficient input in the targeting process. Additionally, as land operations approached and commenced, the Army and Marine ground forces felt they were not apportioned adequate air resources for direct support missions. This was partially due to General Schwarzkopf, the JFC, dual-hatting himself as the Land Component Commander (LCC), causing a

shortage of interaction with his ground forces commanders when issues of apportionment arose. The JFC would go directly to the JFACC without discussing his thoughts with the LCC. This lack of interaction led the ground commanders to believe they were not being adequately represented in the JFACC and JTCB apportioning process. And although the CINC's overall objectives and guidance were clear, there was at times a lack of clear dissemination of intermediate objectives, which caused some confusion with subordinate commanders during land operations.⁵ Once again, even though the Gulf War was a major success, there was a feeling among all services except the USAF that the targeting coordination process was deficient.⁶

Bosnia-Herzegovina

Operations and target coordination in Bosnia-Herzegovina (BH) were very similar to those used in Desert Shield/Desert Storm. It was entirely an air operation until ground forces entered en masse after the signing of the Dayton accords. The Commander Allied Air Forces Southern Europe (COMAIRSOUTH) was the Combined Joint Force Air Component Commander (CJFACC), whose staff maintained the Joint Integrated Prioritized Target List (JIPTL) and ran the JTCB process including all apportionment decisions. The Navy again felt it was given less than fair treatment, partly because national tasking did not allow full time presence of the Carrier Battle Group (CVBG), and partly because of a self inflicted lack of sufficient numbers and seniority of personnel assigned to the Combined Air Operations Center (CAOC). When the land forces and Land Component Commander (LCC) arrived, once again problems arose in targeting

coordination. As the CINC, ADM Smith convened a component commander level JTCB to resolve these issues.

CURRENT DOCTRINE

Joint doctrine has evolved which incorporates many of the targeting coordination lessons from previous conflicts. Currently, Joint Pub 3-0 gives the following guidance concerning establishment of a JTCB:

*JFC's may establish and task an organization within their staffs to accomplish ...broad targeting oversight functions or may delegate the responsibility to a subordinate commander. Typically, JFC's organize Joint Targeting Coordination Boards. [I]t needs to be a joint activity, comprised of representatives from the staff, all components, and if required, their subordinate units. JFCs task commanders or staff officers with the JTCB function based on the JFC's concept of operations...*⁷

Although recommended, joint doctrine makes the formation of the JTCB optional. Additionally, it provides the option of delegating the responsibility of the JTCB function to a subordinate commander. Making the JTCB optional goes against the lessons from Korea and Vietnam which showed the necessity for this entity.

Joint Pub 1-02 states that the JTCB *accomplish broad targeting oversight functions...* and further states the *JTCB may be an integrating center or a JFC-level review mechanism.*⁸ This means it should not review each target, but review priorities & generalities.

Positioning the JTCB below the JFC level, discussed above and in further detail later in this paper, magnified already existing problems with the joint targeting process. Additionally, because of the overwhelming ratio of air operations to the overall scheme

during both the Gulf War and Bosnia operations, these may not be good examples to use when establishing doctrine.

RECENT LESSONS LEARNED

Many improvements have been made in the area of targeting coordination since the Gulf War. Of note is the personnel makeup of a current JFACC. JFACC staffing now includes a more evenly weighted mix between services. This leads to a better integration of assets because there is a superior mix of subject matter experts on-hand to optimize use of weapons platforms. It also increases trust between all components that the ATO reflects an unbiased product. Additionally, it is now commonplace in joint exercises to establish a JTCB. Furthermore, all services have become more familiar with the Joint targeting procedures, hardware and software. Nevertheless there are still problems optimizing the joint targeting procedures with respect to form and function.

During Exercise TANDUM THRUST 93, the JTCB (named the Joint Targeting Coordination Cell) stood up as a relatively small, junior working group (one O-3, O-4 or O-5 from several components, and a J-2 and J-3 representative).

[N]ot all services were represented on the JTCC: ARFOR was not represented and the AFFOR rep[resentative] was double-hatted as the JFACC rep[sic]. Also, ...the Deputy Commander Joint Task Force (DCJTF) [whom the JTCC reported to] was not included in the deliberations that took place at the daily meetings. This resulted in limiting the DCJTF's role to that of reviewer instead of participant and possible arbiter(emphasis added).⁹

By participating in the JTCC, or the more appropriate JTCB, the DCJTF can act as the referee in the targeting process. He can enforce and interpret the "rules" (i.e. JFC guidance) which would help smooth and expedite the targeting priorities and basic apportionment decisions.

Initially, the JTCC was able to provide adequate targeting guidance to plan operations. But as the scope expanded,

the JTCC had difficulty capturing and conveying the commander's intent for strikes. Factors which might have contributed to this difficulty were the scenario escalated, resulting in significantly increased numbers of strike assets... [and] the JTCC lacking... expertise and authority to develop a targeting strategy to support the campaign plan.¹⁰

Eventually the JTCC was replaced with a more senior group, and additional members were added who made important contributions to the JTCB process, namely, the Joint Coordinated Electronic Warfare Officer, who provided guidance in setting reconnaissance priorities, and the Chief of Staff, who voiced the CJTF's view of targeting issues.¹¹ The same problem occurred during US Pacific Fleet's (PACFLT) Exercise NORTHERN EDGE 96, where the JTCB was organized as a "council of Colonels" and didn't exploit the potential of a more senior JTCB to synchronize the air battle and provide high level targeting guidance.¹² The salient lessons point to the need for a senior JTCB, with command level presence playing an integral role (e.g. the Deputy JFC), and the benefits of having representation from all force commanders and functional commanders.

During US Central Command's Exercise BRIGHT STAR 94, the JTF did not establish a joint targeting entity to integrate the interdiction capabilities of the Joint Special Operations Task Force (JSOTF) and air forces into a JTF operational plan. This resulted in minimal integration of the actions of air forces, special forces, and ground forces. The lesson is that a joint targeting entity, by doctrine a JTCB, is essential when integrating forces. This is true no matter what the makeup of a joint force is. If there is a complex

enough need to assemble a joint force, there is also the need to integrate all forces for maximum targeting effects.¹³

In both US Southern Command's Exercise FUERTES DEFENSAS 93 and US Pacific Fleet's (PACFLT) Exercise TEMPO BRAVE 94-1, the JTCB did not put out it's first targeting guidance and JIPTL until the JFACC was well into the ATO cycle.^{14,15} This meant there was no overall guidance from the senior targeting entity at the time detailed planning was required. Although it is understood that the Joint Target List (JTL) may be incomplete at the beginning of a crisis, it is important that initial guidance and priorities (the JIPTL) are promulgated as soon as possible using the existing JTL. A solution would be to convene the JTCB at the beginning of the Crisis Action Planning phase.

One reason for the delay in publishing guidance during TEMPO BRAVE 94-1 was PACFLT's requirement that the JTCB approve individual targets. The JTCB was undermanned to provide this level of detail which resulted in excessive delays in turnaround time and reduced planning time available to component commanders.¹⁶ Joint Pub 3-0 states that the JFC [through the JTCB] *establish broad planning objectives and guidance for attack...[They] set priorities, provide targeting guidance, and determine the weight of effort to be provided to various operations.*¹⁷ It also states that all levels involved in the targeting process *should establish procedures and mechanisms to manage the targeting function.*¹⁸ FM 6-20-10/MCRP 3-1.6.14 further clarifies the depth of focus the JTCB should have:

The JTCB should not have a micro level focus. It should not be tasked to perform the same functions as the staffs of functional components or the JFC staff. The principal focus of the JTCB is on operational levels of war and operational fires. The JTCB helps the JFC develop and communicate priorities and apportionment decisions. It does not select specific targets or methods of attack. The JTCB also

reviews restricted targets and areas where special operations forces are operating to avoid endangering current or future operations.¹⁹

Functional components are staffed and fully capable of conducting execution level planning. It is critical that the JFACC, in particular, be allowed to apportion his forces efficiently and expeditiously. Providing this macro level guidance allows him to flex operations as the situation develops and changes. This often requires changes late in the ATO process, which can only successfully occur if the JFACC has control of his own targeting process.

Exercise OCEAN VENTURE 93 showed the value of regular meetings of the component commanders to resolve targeting issues. *The CJTF, JFACC, JFMCC, and senior representatives from other component commanders were co-located. This co-location of commanders had a synergistic effect through the dynamic and personal "eye-to-eye" interplay on the JTCCB, thus allowing early or preemptive conflict resolution and providing clear guidance for producing the JIPTL.²⁰* Building a consensus between the component commanders allows clear guidance to be produced and disseminated. A coherent JIPTL and Commander's intent become well understood, leading to clarity of mission goals at all levels in the chain of command.

It is also well known that service parochialism plays a part in joint operations. It is a phenomenon which is unavoidable but, in fact, is healthy to a degree. Just like competition in business, it helps spawn new ideas, technology and techniques which can improve overall results. Parochialism will stay with the military system, and finding ways to address it are in the best interests of the JFC when conducting operations. Co-locating

commanders, via Video Telephone Conferencing (VTC) if necessary, would provide the personal interaction at the highest level to help resolve issues.

Parochialism is also a significant reason the JTL database should reside at the JFC level. The JTL is the definitive list for the entire operation or campaign; it belongs to the JFC. JFC staffs should manage the JTL, and increase their manning level with additional targeteers and database managers to perform this function. This would reduce the burden on functional commander staffs an equivalent amount, and therefore would not necessitate an increase in overall force manning to accomplish. Current data transfer systems in use are sufficient to provide all necessary mission planning information to the component commanders.

Finally, when the JTCB is positioned and composed properly, and provides macro level guidance, it is effective. Such was the case during USCINCPAC Exercise COBRA GOLD 93. The targeting and guidance messages were effective in providing the JFACC and component commanders the JFC's intent, level of effort, and targeting guidance. It was recommended that the JTCB be augmented to better handle the associated administrative tasks. These augmentees would help review and scrub the JTL in preparation for the JTCB meeting, and produce the Commander's Intent messages.²¹ The new Joint Pub 3-09 (draft) concerning fire support coordination addresses this group, referred to as the Joint Fires Element (JFE) and chaired by the J-3, who would accomplish the "dirty hands" work for the JTCB.²²

CONCLUSIONS

The Joint Targeting Coordination Board provides a critical function in the joint operations arena. Historical lessons have shown that every joint force did, or should have,

utilized one. History has also shown us that each conflict and scenario are different, and applying past doctrine is often not successful in future operations. To optimize the effectiveness of the JTCB, it should be utilized whenever there is a possibility that targeting the operational depth of an opponent is required. It should be positioned under the Joint Force Commander and above the component commanders, where trust can be fostered and guidance given. It should concentrate on macro style targeting issues to affect the strategic and operational levels of war. Joint doctrine could benefit from applying the lessons of history, and instituting these changes.

NOTES

¹ Headquarters, United States Air Force, JFACC 94-USAF JFACC Primer, 2nd ed. (Washington: 1994), pp. 3-4.

² Ibid., pp. 2-3.

³ Ibid., p. 4; Michael R. Moeller, The Sum of Their Fears: The relationship between the Joint Targeting Coordination Board and the Joint Force Commander (Maxwell Air Force Base, Alabama: Air University Press, 1995), p. 6-8; Jonathan B. Hunter, Joint Operational Targeting: Who's In Charge: CINC, JFACC or JTCCB? (Fort Leavenworth, Kansas: School of Advanced Military Studies, 1994), p. 19-22.

⁴ JFACC Primer, pp. 4-5; Moeller, pp. 9-11.

⁵ Moeller, p. 14.

⁶ Ibid., pp. 13-15., JFACC Primer, pp. 5-7., Hunter, pp. 23-35.

⁷ Joint Pub 3-0, Doctrine for Joint Operations, (Washington: 1995), p. III-26.

⁸ Joint Pub 1-02, DoD Dictionary of Military and Associated Terms, (Washington: 1994), p. 207.

⁹ Maureen Wigge, Joint Targeting Coordination Board in Exercise Tandem Thrust 93, (Center for Naval Analysis: 1993), p. 5. This data, analysis, and findings are from a quick response analysis and are subject to change.

¹⁰ Ibid., p. 8.

¹¹ Ibid., p. 9.

¹² "Joint Targeting Coordination Board." JULLS no. LLWE0-04371. 16 April 1996. Joint Uniform Lessons Learned System (JULLS) Database. (Washington: December 1996).

¹³ "Lack of a Joint Targeting Entity During Bright Star 94." JULLS no. 10735-81394. 11 November 1993. Joint Uniform Lessons Learned System (JULLS) Database. (Washington: December 1996).

¹⁴ "Joint Targeting Coordination Board." JULLS no. 92446-02514. 12 August 1993. Joint Uniform Lessons Learned System (JULLS) Database. (Washington: December 1996).

¹⁵ "Joint Target List (JTL) Procedures." JULLS no. 42835-33100. 25 April 1994. Joint Uniform Lessons Learned System (JULLS) Database. (Washington: December 1996).

¹⁶ Ibid.

¹⁷ Joint Pub 3-0, pp. III-25,26.

¹⁸ Ibid., p. III-27.

¹⁹ Headquarters, Department of the Army/United States Marine Corps, FM 6-20-10/MCRP 3-1.6.14, Tactics, Techniques, and Procedures for The Targeting Process, (Washington: 1996), pp. 3-4,5.

²⁰ "CJTF Co-located With JFACC, Naval Component and JTCB." JULLS no. 60133-86986. 01 May 1993. Joint Uniform Lessons Learned System (JULLS) Database. (Washington: December 1996).

²¹ "Joint Targeting Coordination Board." JULLS no. 51827-79098. 14 May 1993. Joint Uniform Lessons Learned System (JULLS) Database. (Washington: December 1996).

²² Telephone conversation with Major Oddie Ogden, USMC, J344 at US Second Fleet, Norfolk, VA, 03 February 1996.

BIBLIOGRAPHY

- Center for Naval Analyses. Fleet Tactics and Capabilities Program. Joint Targeting Coordination Board in Exercise Tandem Thrust 93. CNA 37 93-0011. Alexandria, VA: 1993.
- Hunter, Jonathan B. Joint Operational Targeting: Who's In Charge; CINC, JFACC or JTCCB? Fort Leavenworth, KS: School of Advanced Military Studies, 1994.
- Moeller, Michael R. The Sum of Their Fears: The relationship between the Joint Targeting Coordination Board and the Joint Force Commander. Maxwell Air Force Base, AL: Air University Press, 1995.
- Powers, Christopher L. "Joint Warfighting Without Joint Bureaucracy." Unpublished Research Paper, U. S. Naval War College, Newport, RI: 1993.
- Probasco, Michael T. Joint Force Air Component Commander or Coordinator. Maxwell Air Force Base, AL: Air University Press, 1995.
- Spence, James M. "Naval Doctrine Issues For the Joint Force Air Component Commander." Unpublished Research Paper, U. S. Naval War College, Newport, RI: 1994.
- Telephone conversation with Major Oddie Ogden, USMC, J344 at US Second Fleet, Norfolk, VA. 03 February 1996.
- U. S. Air Force. JFACC 94-USAF JFACC Primer. 2nd ed. Washington: 1994.
- U. S. Army Dept. and U. S. Marine Corps Dept. Tactics, Techniques, and Procedures for The Targeting Process. FM 6-20-10/MCRP 3-1.6.14. Washington: 1996.
- U. S. Joint Staff. Command and Control for Joint Air Operations. Joint Pub 3-56.1. Washington: 1994.
- U. S. Joint Staff. Doctrine for Joint Operations. Joint Pub 3-0. Washington: 1995.
- U. S. Joint Staff. DoD Dictionary of Military and Associated Terms. Joint Pub 1-02. Washington: 1994.
- U. S. Joint Staff. DoD Dictionary of Military and Associated Terms. Joint Pub 1-02. Washington: 1994.
- U. S. Joint Staff. Intelligence Support to Joint Operations. Joint Pub 2-0. Washington: 1995.

- U. S. Joint Staff. Joint Uniform Lessons Learned System (JULLS) Database. Joint Targeting Coordination Board. JULLS no. 51827-79098. Washington: 1996.
- U. S. Joint Staff. Joint Uniform Lessons Learned System (JULLS) Database. Joint Targeting Coordination Board. JULLS no. LLWE0-04371. Washington: 1996.
- U. S. Joint Staff. Joint Uniform Lessons Learned System (JULLS) Database. Lack of a Joint Targeting Entity During Bright Star 94. JULLS no. 10735-81394. Washington: 1996.
- U. S. Joint Staff. Joint Uniform Lessons Learned System (JULLS) Database. Joint Targeting Coordination Board. JULLS no. 92446-02514. Washington: 1996.
- U. S. Joint Staff. Joint Uniform Lessons Learned System (JULLS) Database. Joint Target List (JTL) Procedures. JULLS no. 42835-33100. Washington: 1996.
- U. S. Joint Staff. Joint Uniform Lessons Learned System (JULLS) Database. CJTF Co-located With JFACC, Naval Component and JTCB. JULLS no. 60133-86986. Washington: 1996.
- U. S. Joint Staff. Joint Uniform Lessons Learned System (JULLS) Database. Joint Task Force Southwest Asia Assessment Report. JULLS no. 61634-06144. Washington: 1996.
- U. S. Joint Staff. Joint Uniform Lessons Learned System (JULLS) Database. Joint Targeting Coordination Board (JTCB). JULLS no. 92437-82927. Washington: 1996.
- U. S. Joint Staff. JTF Planning Guidance and Procedures. Joint Pub 5-00.2. Washington: 1991.
- U. S. Joint Staff. JTTP for Joint SEAD. Joint Pub 3-01.4. Washington: 1993.
- U. S. Joint Staff. Reconnaissance, Surveillance, & Target Acquisition Support. Joint Pub 3-55. Washington: 1993.
- U. S. Marine Corps Dept. Fire Support Coordination. FMFM 6-18. Washington: 1992.
- U. S. Marine Corps Dept. The Theater Air to Ground System. FMFRP 5-62. Washington: 1994.
- U. S. Naval Doctrine Command. Joint Force Air Component Commander Organization and Processes. NWP 3-56.1. Norfolk, VA: 1995.

